



# STIC Search Report

## Biotech-Chem Library

STIC Database Tracking Number: 143063

**TO:** Minh-Tam Davis  
**Location:** 3a24 / 3c18  
**Thursday, February 03, 2005**  
**Art Unit:** 1642  
**Phone:** 272-0830  
**Serial Number:** 10 / 048046

**From:** Jan Delaval  
**Location:** Biotech-Chem Library  
**Rem 1a51**  
**Phone:** 272-2504  
**[jan.delaval@uspto.gov](mailto:jan.delaval@uspto.gov)**

### Search Notes

*July/05*

143063

From: Chan, Christina  
Sent: Monday, January 24, 2005 2:59 PM  
To: Davis, Minh-Tam; STIC-Biotech/ChemLib  
Subject: RE: Rush searh request for 10/048046

Please rush. Thanks Chris

*Chris Chan*

TC 1600 New Hire Training Coordinator and SPE 1644  
(571)-272-0841  
Remsen, 3E89

*CRF:G*

-----Original Message-----

From: Davis, Minh-Tam  
Sent: Monday, January 24, 2005 1:21 PM  
To: Chan, Christina  
Subject: Rush searh request for 10/048046

Please search in commercial database, issued patent files and PGPUB.

Please have the search results in both disk and pape files.

- 1) Oligomer search for SEQ ID NO:1, with **size limitation to less or equal to 30 nucleotides**.
- 2) Oligomer search for the fragment of SEQ ID NO:1 that encodes amino acids 31-103 of SEQ ID NO:2, with **size limitation to less or equal to 30 nucleotides**.
- 3) Oligomer search for the fragment of SEQ ID NO:1 that encodes amino acids 303-346 of SEQ ID NO:2, with **size limitation to less or equal to 30 nucleotides**.
- 4) Oligomer search for the fragment of SEQ ID NO:1 that encodes amino acids 476-641 of SEQ ID NO:2, with **size limitation to less or equal to 30 nucleotides**.

Thank you.

MINH TAM DAVIS  
ART UNIT 1642, ROOM 3A24, MB 3C18  
272-0830

*Chris*, 22504  
213105

```
-----  
? s kit  
    S1 31939 KIT  
? s instruction??  
    S2 110953 INSTRUCTION??  
? s s1 and s2  
    31939 S1  
    110953 S2  
    S3 4277 S1 AND S2  
? s PCR or polymerase  
    4598 PCR  
    7379 POLYMERASE  
    S4 9921 PCR OR POLYMERASE  
? s s3 and s4  
    4277 S3  
    9921 S4  
    S5 372 S3 AND S4  
? s s5 and py<1999  
    372 S5  
    3124537 PY<1999  
    S6 25 S5 AND PY<1999  
? s buffer?? or applicator or container or cup?? or microtiter  
    86626 BUFFER??  
    17159 APPLICATOR  
    174333 CONTAINER  
    48798 CUP??  
    1100 MICROTITER  
    S7 315654 BUFFER?? OR APPLICATOR OR CONTAINER OR CUP?? OR  
    MICROTITER  
? s s6 and s7  
    25 S6  
    315654 S7  
    S8 16 S6 AND S7  
? s label?  
    S9 41218 LABEL?  
? s s8 and s9  
    16 S8  
    41218 S9  
    S10 6 S8 AND S9  
? t s10/3,k,ab/1-6
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10/3,K,AB/1  
DIALOG(R)File 340:CLAIMS(R)/US Patent  
(c) 2005 IFI/CLAIMS(R). All rts. reserv.

Dialog Acc No: 3072549 IFI Acc No: 9839080  
IFI Publication Control No: 9839080  
Document Type: C  
TELOMERASE ACTIVITY ASSAYS; CANCER DIAGNOSIS  
Inventors: Harley Calvin Bruce (US); Kim Nam Woo (US); Weinrich Scott  
Lawrence (US)  
Assignee: Geron Corp  
Assignee Code: 37860  
Publication (No,Kind,Date), Applic (No,Date):  
US 5837453 A 19981117 US 95482132 19950607  
Calculated Expiration: 20151117  
(Cited in 003 later patents)  
Priority Applic(No,Date): US 95482132 19950607; US 92882438  
19920513; US 9338706 19930324; US 9360952 19930513; US 93151477  
19931112; US 94153051 19940223; US 94255774 19940607; US 94315214  
19940928

Abstract: Telomerase activity in a sample can be measured using a two reaction protocol involving telomerase substrate and primer extension

steps. The presence of telomerase activity in a human somatic tissue or cell sample is po

a direct precursor of Taxol (Taxol is a registered trademark of Bristol-Myers Squibb for paclitaxel); (iii) baccatin III appears to have cytoplasmic and plastidic...

2/3,K,AB/3 (Item 3 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2005 The Dialog Corp. All rts. reserv.

12559249 PMID: 7700340  
**Taxol trademark.**  
Khan N U  
Nature (ENGLAND) Mar 30 1995, 374 (6521) p400, ISSN 0028-0836  
Journal Code: 0410462  
Comment on Nature. 1995 Feb 2;373(6513) 370; Comment on PMID 7830775  
Document type: Comment; Letter  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

**Taxol trademark.**

2/3,K,AB/4 (Item 4 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2005 The Dialog Corp. All rts. reserv.

12547480 PMID: 7885437  
The use of Taxol as a trademark.  
Chesnoff S  
Nature (ENGLAND) Mar 16 1995, 374 (6519) p208, ISSN 0028-0836  
Journal Code: 0410462  
Comment on Nature. 1995 Feb 2;373(6513) 370; Comment on PMID 7830775  
Document type: Comment; Letter  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

The use of Taxol as a trademark.

2/3,K,AB/5 (Item 1 from file: 55)  
DIALOG(R)File 55:Biosis Previews(R)  
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0012193979 BIOSIS NO.: 199900453639  
Taxane and ABA production in yew under different soil water regimes  
AUTHOR: Hoffman Angela (Reprint); Shock Clinton; Feibert Erik  
AUTHOR ADDRESS: Department of Chemistry and Physics, University of  
Portland, Portland, OR, 97203, USA\*\*USA  
JOURNAL: Hortscience 34 (5): p882-885 Aug., 1999 1999  
MEDIUM: print  
ISSN: 0018-5345  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: Taxol(R) (paclitaxel), an important anticancer agent, is found in many species of yew. As the need for Taxol increases, sustainable sources must be found for this drug. Plants often respond to stress with increased production of terpenoid compounds such as Taxol and related taxanes or hormones such as abscisic acid (ABA). To determine whether water stress would enhance the production and recovery of Taxol from stem clippings, 100 young *Taxus X media* 'Hicksii' shrubs were grown for

sustainable production of Taxol from stem clippings for two seasons in the dry climate of the Malheur Experiment Station in Ontario, Ore. Shrubs were grown under minimal, moderate, or severe water stress, and the relationships between taxane content and 1) soil and plant water potentials, 2) percentage of stomatal closure, and 3) ABA content were examined. Severely water-stressed shrubs produced significantly more taxanes and ABA than did the less stressed shrubs. Chemical names used: Taxol; 10-deacetyl baccatin III; baccatin III; 10-deacetyl taxol, cephalomannine; 7-epi; 10-deacetyl taxol; abscisic acid. **Taxol** is a registered trademark of Bristol-Myers Squibb.

...ABSTRACT: baccatin III; baccatin III; 10-deacetyl taxol, cephalomannine; 7-epi; 10-deacetyl taxol; abscisic acid. **Taxol** is a registered trademark of Bristol-Myers Squibb.

2/3, K, AB/6 (Item 1 from file: 34)  
DIALOG(R) File 34: SciSearch(R) Cited Ref Sci  
(c) 2005 Inst for Sci Info. All rts. reserv.

06816274 Genuine Article#: ZU537 Number of References: 18  
Title: Bioprospecting for Taxol in angiosperm plant extracts - Using high performance liquid chromatography thermospray mass spectrometry to detect the anticancer agent and its related metabolites in Filbert trees (ABSTRACT AVAILABLE)

Author(s): Hoffman A; Khan W; Worapong J; Strobel GA; Griffin DA; Arbogast B; Barofsky DF; Boone RB; Ning L; Zheng P; Daley LS

Corporate Source: UNIV PORTLAND,/PORTLAND//OR/97203; MONTANA STATE UNIV,DEPT PLANT PATHOL/BOZEMAN//MT/59717; OREGON STATE UNIV,MASS SPECTROMETER FACIL/CORVALLIS//OR/97331; OREGON STATE UNIV,AGR FACIL MASS SPECT/CORVALLIS//OR/97331; UNIV MAINE,DEPT WILDLIFE ECOL/ORONO//ME/04469; MEDTRONIC,/MINNEAPOLIS//MN/; OREGON STATE UNIV,DEPT HORT/CORVALLIS//OR/97331

Journal: SPECTROSCOPY, 1998, V13, N6 (JUN), P22-32

ISSN: 0887-6703 Publication date: 19980600

Publisher: ADVANSTAR COMMUNICATIONS, 131 W FIRST ST, DULUTH, MN 55802

Language: English Document Type: ARTICLE

Abstract: We describe the first report of the recovery of **Taxol** (the registered trademark name of paclitaxel) from an angiosperm. We identified Taxol using ion-spray liquid chromatography-mass spectrometry (a form of HPLC-MS). We screened extracts from twigs from several *Corylus* species and cultivars for signals resembling paclitaxel (tax-11-en-9-one, 5 beta, 20-epoxy-1,2 alpha, 4, 7 beta, 10 beta, 13 alpha-hexahydroxy-4,10-diacetate-2-benzoate-13-[alpha-phenylhippurate], commonly known as Taxol tone of the most promising anticancer agents now available). Based on selective ion mass spectroscopy data on mass and fractionation patterns and co-chromatography in four systems with authentic standards, we show that it is highly probable that *Corylus avellana* cv. "Gasaway" stems contain Taxol. Four different endophyte cultures from these plant tissues were immunoassay positive for Taxol.

Abstract: We describe the first report of the recovery of **Taxol** (the registered trademark name of paclitaxel) from an angiosperm. We identified Taxol using ion-spray liquid chromatography-mass...

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SYSTEM:OS - DIALOG OneSearch  
File 155: MEDLINE(R) 1951-2005/Jan W5  
(c) format only 2005 The Dialog Corp.  
\*File 155: Medline has resumed updating. Please see  
HELP NEWS 155 for details.  
File 55: Biosis Previews(R) 1993-2005/Jan W4  
(c) 2005 BIOSIS  
\*File 55: Price change effective Jan 1, 2005. Enter HELP  
RATES 55 for details.  
File 34: SciSearch(R) Cited Ref Sci 1990-2005/Jan W5  
(c) 2005 Inst for Sci Info  
\*File 34: Price change effective Jan 1, 2005. Enter HELP  
RATES 34 for details.  
File 434: SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info  
\*File 434: Price change effective Jan 1, 2005. Enter HELP  
RATES 434 for details.  
File 340: CLAIMS(R)/US Patent 1950-05/Feb 03  
(c) 2005 IFI/CLAIMS(R)  
\*File 340: 2004 Reload is online as of October 6, 2004. Pricing  
changes effective October 1, 2004. See HELP NEWS 340 for details.

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Set Items Description
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? s taxol (5n)trademark
    19440 TAXOL
    2354 TRADEMARK
S1      11 TAXOL (5N)TRADEMARK
? rd
>>> Duplicate detection is not supported for File 340.

>>> Records from unsupported files will be retained in the RD set.
...completed examining records
    S2      6 RD (unique items)
? t s2/3,k,ab/1-6

2/3,K,AB/1      (Item 1 from file: 155)
DIALOG(R)File 155: MEDLINE(R)
(c) format only 2005 The Dialog Corp. All rts. reserv.
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13328023 PMID: 9000007  
Fluorescent taxoids.  
Guy R; Scott Z; Sloboda R; Nicolaou K  
Department of Chemistry, The Skaggs Institute of Chemical Biology, The  
Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla,  
California 92037, USA.  
Chemistry & biology (ENGLAND) Dec 1996, 3 (12) p1021-31, ISSN  
1074-5521 Journal Code: 9500160  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed  
BACKGROUND: Taxol is a natural product produced by the Pacific Yew, *Taxus brevifolia*, that has emerged as a prominent chemotherapeutic agent for the treatment of solid tumors. Taxol's biochemical mode of action has been well studied: it binds to microtubules, stabilizing them and preventing their depolymerization to tubulin subunits. At lower dosage levels, taxol also interferes with the normal dynamics of the tubulin-microtubule equilibrium. This biochemical effect causes taxol's ultimate physiological effect, cell cycle arrest; taxol is thought to block anaphase A of mitosis. Taxol also causes a number of intriguing secondary effects on interphase cells that are poorly understood. We believed that a bio-active fluorescent taxol derivative could be a useful tool in the study of these cellular

mechanisms, especially in interphase cells. RESULTS: We have synthesized and characterized a series of stable, fluorescently labeled derivatives of taxol that bind to microtubules and have cytotoxicities similar to that of taxol. Fluorescence microscopy experiments in interphase human foreskin fibroblast (HFF) cells indicate that one of these, a sulforhodamine taxoid, is particularly well suited for optical microscopy. The use of this taxoid in HFF cells revealed a previously undetected localization of taxoids to the nucleolus during interphase. CONCLUSIONS: The production of a new fluorescent derivative of taxol provides a useful tool, enabling cellular biologists to study taxol's mechanism of action. It is hoped that this material will prove particularly useful for the study of taxol's effects upon interphase cells. Although in common usage for the last 20 years, **Taxol** is now a registered trademark of Bristol-Myers Squibb.

The copyright of Bristol-Myers Squibb is recognized when Taxol or taxol is used in this article.

... taxol's effects upon interphase cells. Although in common usage for the last 20 years, **Taxol** is now a registered trademark of Bristol-Myers Squibb. The copyright of Bristol-Myers Squibb is recognized when Taxol or...

2/3, K, AB/2 (Item 2 from file: 155)  
DIALOG(R) File 155: MEDLINE(R)  
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13316255 PMID: 8987474

Metabolic inhibitors, elicitors, and precursors as tools for probing yield limitation in taxane production by *Taxus chinensis* cell cultures.

Srinivasan V; Ciddi V; Bringi V; Shuler M L  
School of Chemical Engineering, Cornell University, Ithaca, New York 14853, USA.

Biotechnology progress (UNITED STATES) Jul-Aug 1996, 12 (4) p457-65,  
ISSN 8756-7938 Journal Code: 8506292

Contract/Grant No.: R01 CA 55138; CA; NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Inhibition of biosynthetic enzymes and translation and translocation processes, elicitation, and precursor feeding were used to probe biosynthetic pathway compartmentation, substrate-product relationships, and yield limitation of the diterpenoid taxanes in cell cultures of *Taxus chinensis* (PRO1-95). The results suggest the following: (i) the source of isopentenyl pyrophosphate in taxane production is likely plastidic rather than cytoplasmic; (ii) baccatin III may not be a direct precursor of **Taxol** (**Taxol** is a registered trademark of Bristol-Myers Squibb for paclitaxel); (iii) baccatin III appears to have cytoplasmic and plastidic biosynthetic components, while Taxol production is essentially plastidic; and (iv) arachidonic acid specifically stimulates Taxol production but does not have a significant effect on baccatin III yield. Semiempirical mathematical models were used to describe these results and predict potential yield-limiting steps. Model simulations suggest that, under current operating conditions, Taxol production in *Taxus chinensis* (PRO1-95) cultures is limited by the ability of the cells to convert phenylalanine to phenylisoserine rather than by the branch-point acyl transferase. This result is supported by the lack of improvement of Taxol yield by feeding phenylalanine or benzoylglycine. The methods described in this article, while specifically expanding our knowledge of taxane production in PRO1-95 cultures, could be generally useful in investigating complex aspects of secondary metabolic pathways in plant cell cultures, especially when details of the pathway and compartmentation are sparse.

...likely plastidic rather than cytoplasmic; (ii) baccatin III may not be